

FIG. 1

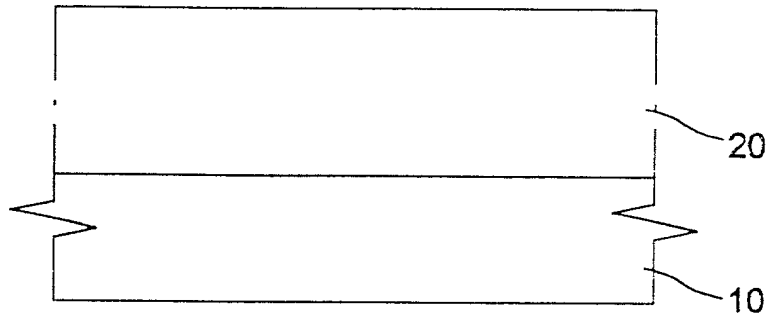


FIG. 2

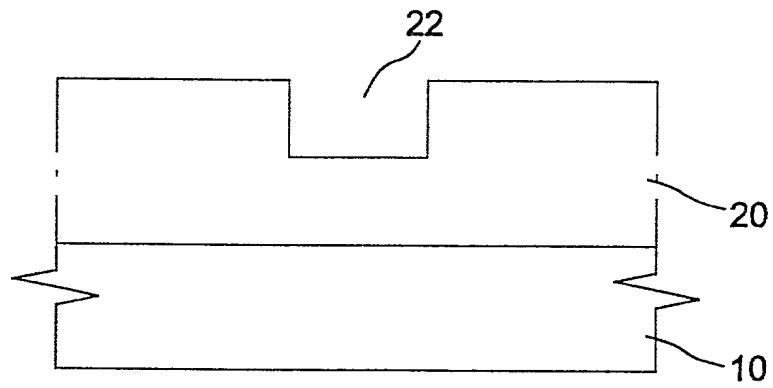


FIG. 3

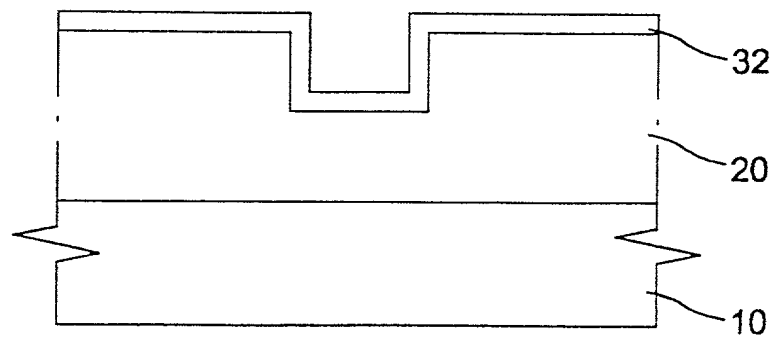


FIG. 4

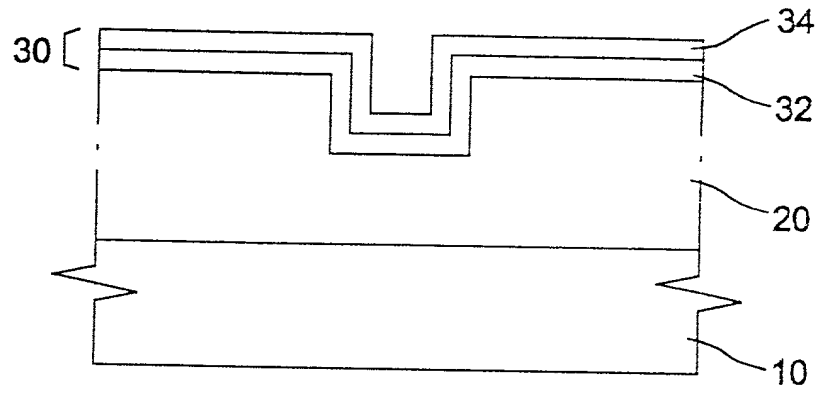


FIG. 5

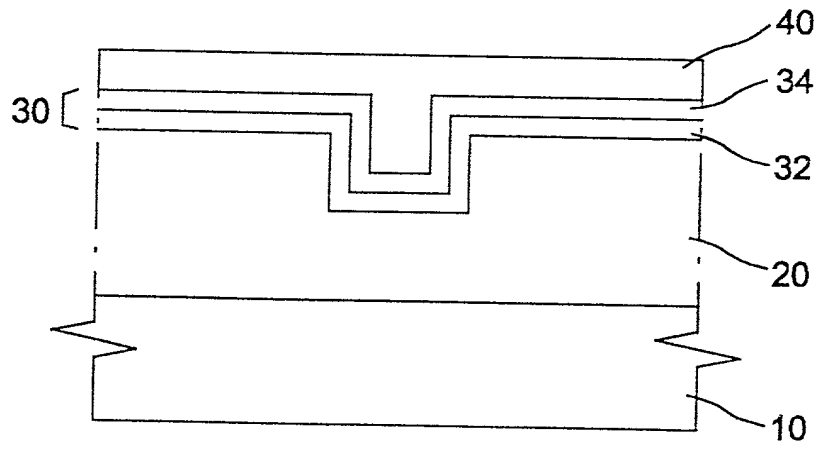


FIG. 6

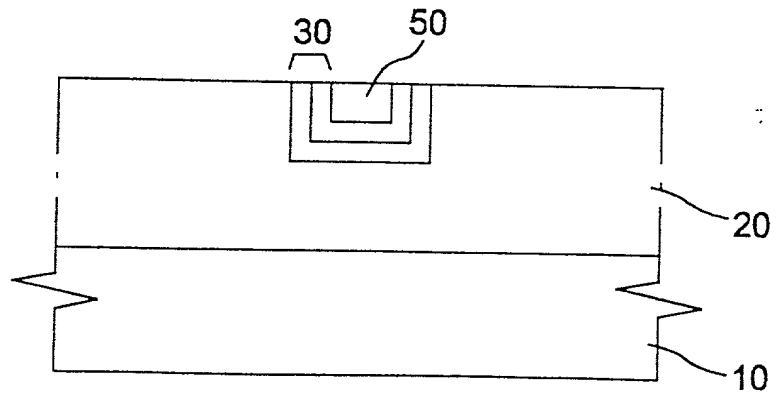


FIG. 7

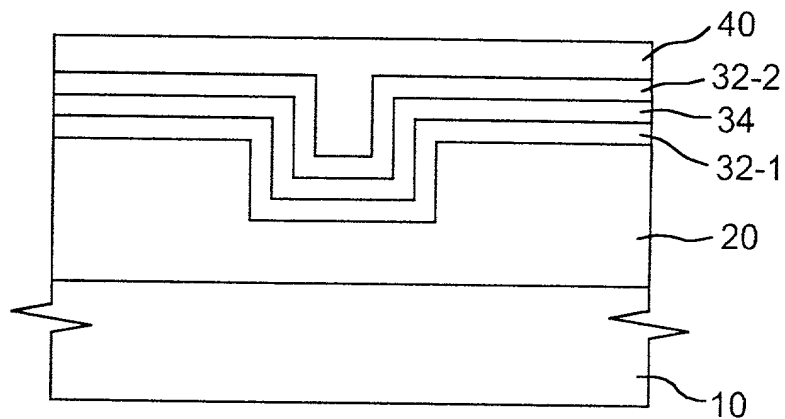
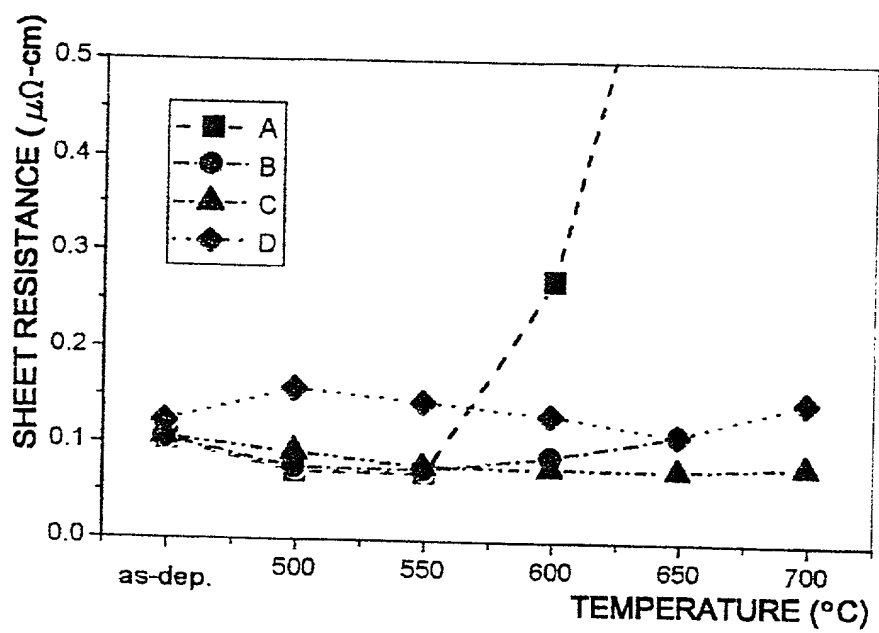


FIG. 8



SAMPLE A : Cu(300nm) / TiN(20nm) / Si  
 SAMPLE B : Cu(300nm) / Al (5nm) / TiN(20nm) / Si  
 SAMPLE C : Cu(300nm) / Al (10nm) / TiN(20nm) / Si  
 SAMPLE D : Cu(300nm) / Al (20nm) / TiN(20nm) / Si

FIG. 9A

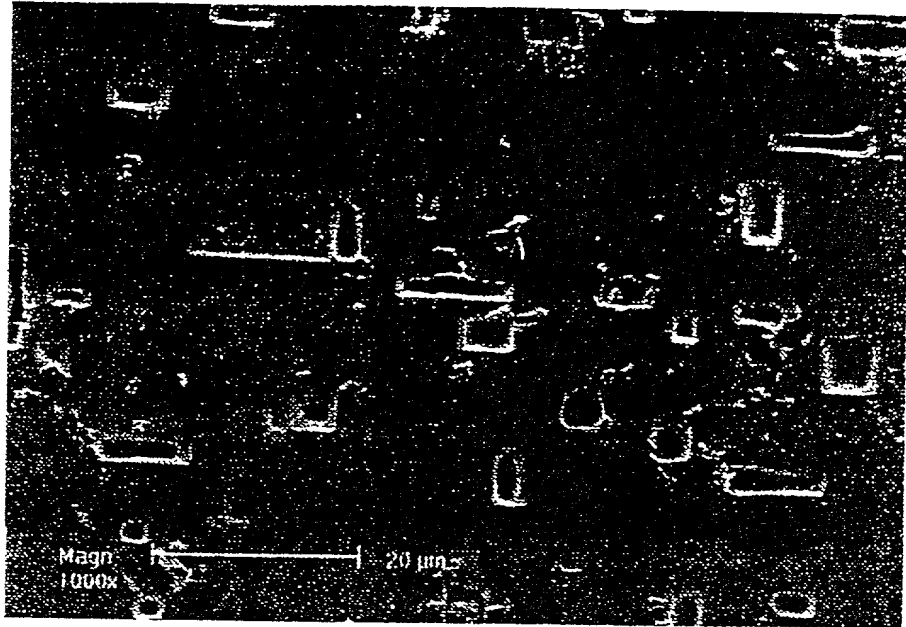


FIG. 9B

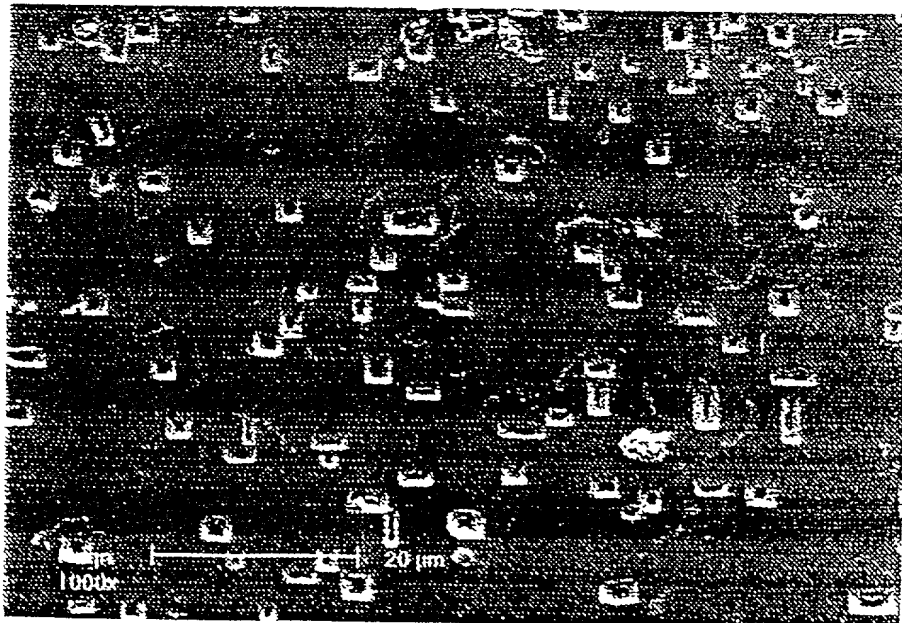


FIG. 9C

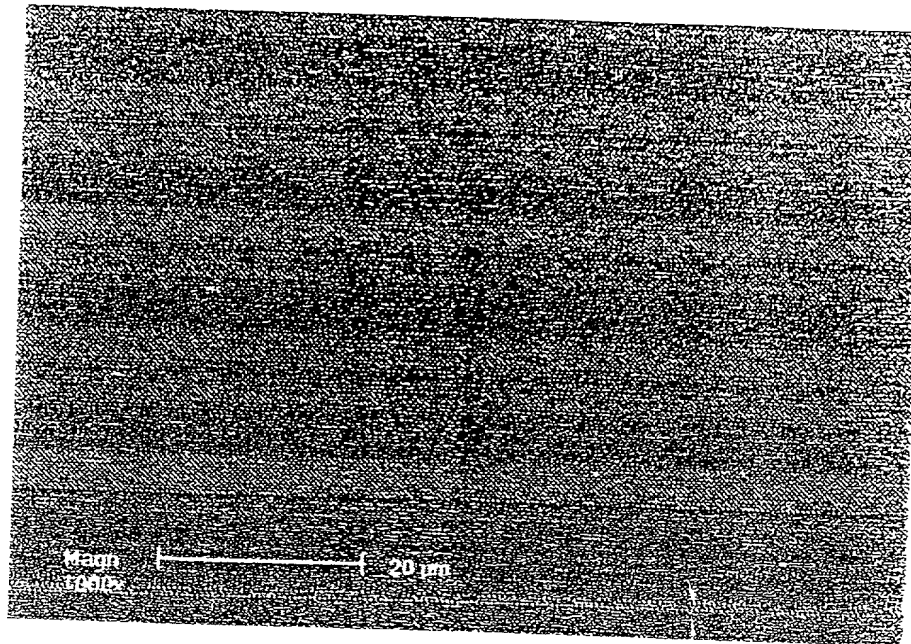
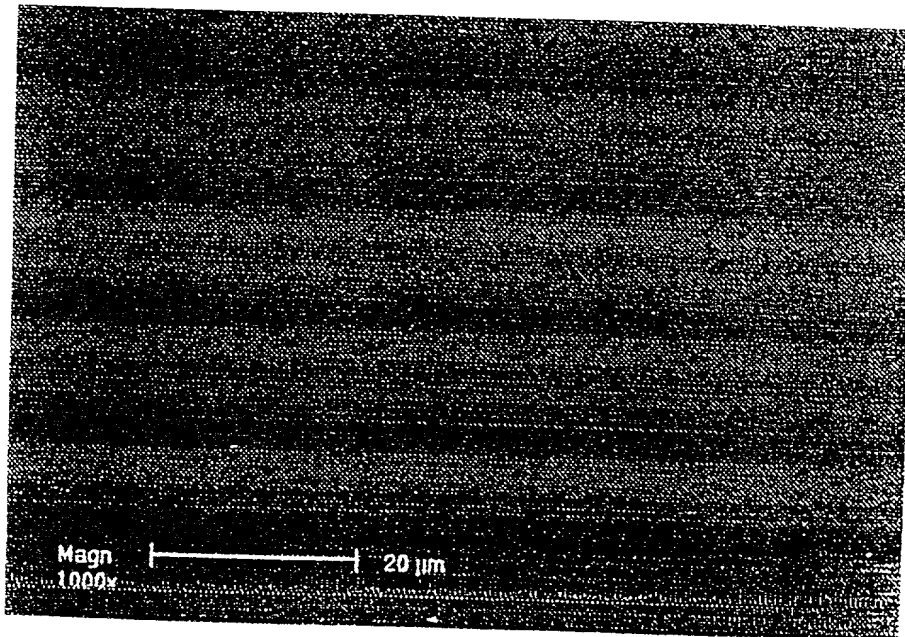


FIG. 9D



10007304, 120501  
105021, 105200F

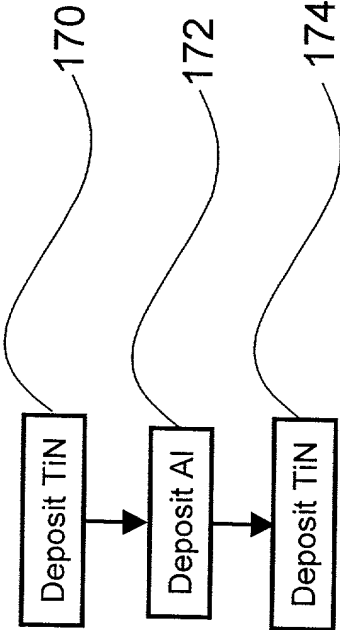


Fig. 10

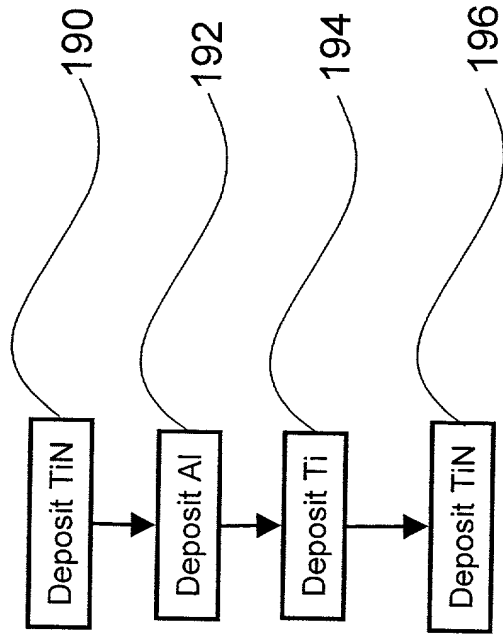


Fig. 11

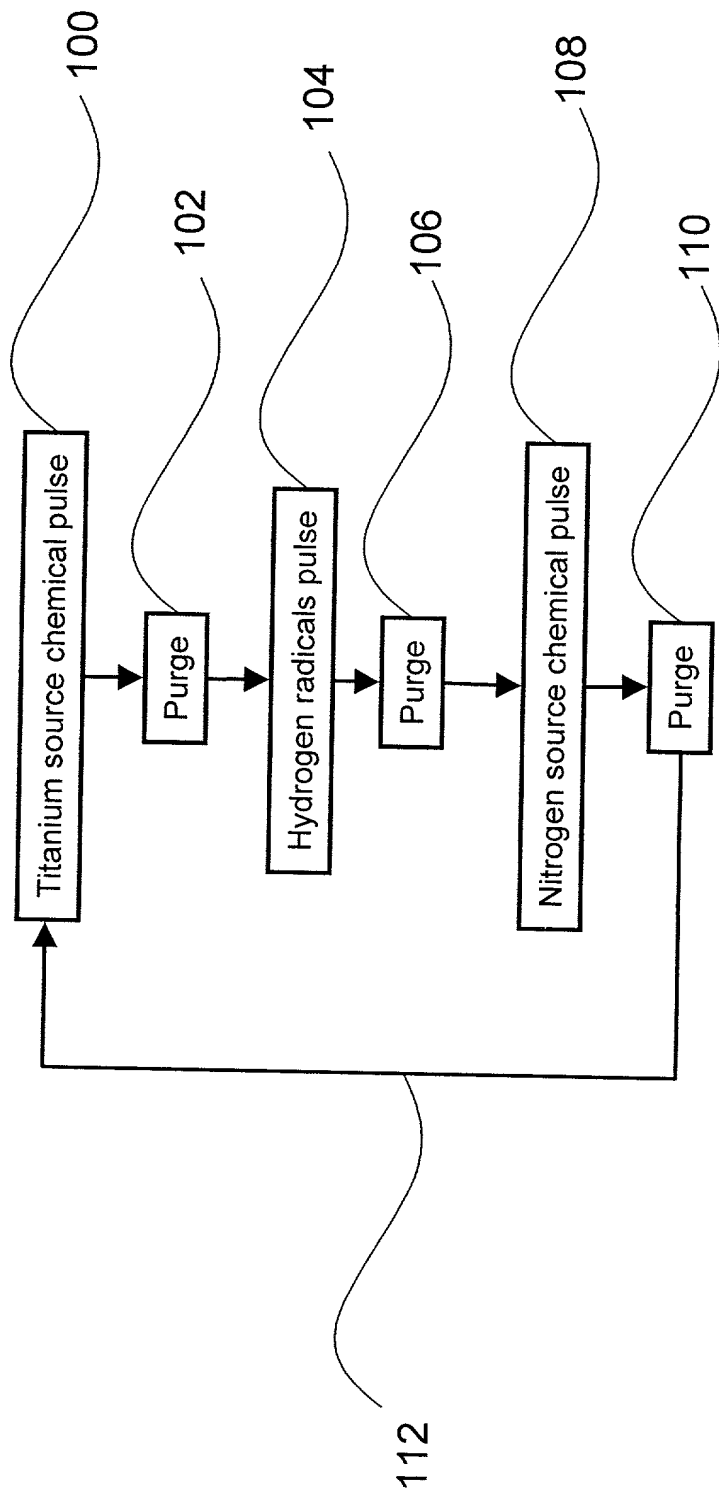


Fig. 12





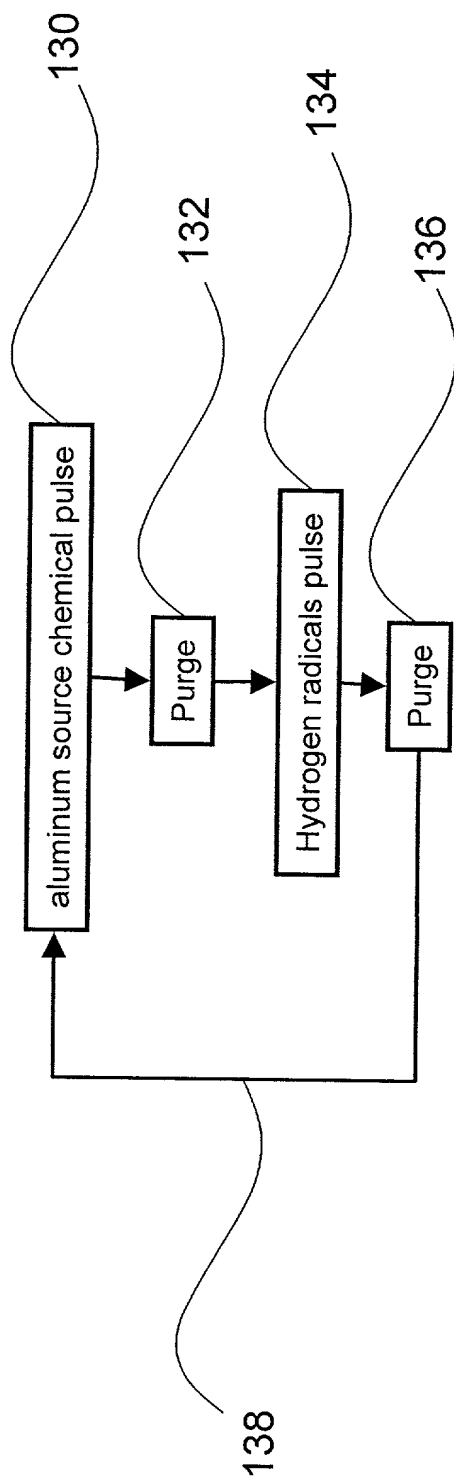


Fig. 14

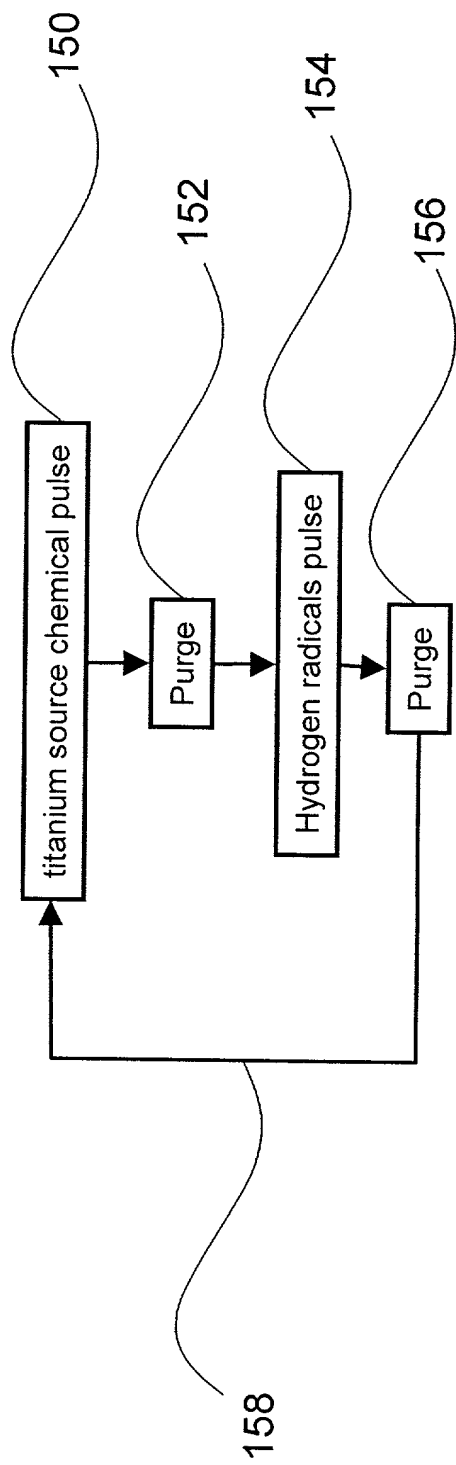


Fig. 15